AN
INTERNSHIP REPORT

ON

PAINT SHOP MANAGEMENT SYSTEM PROJECT

BY

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Abstract

The project work entitled “**Paint Shop Management system**”. This Project helps us to maintain the details of all the goods in the sports shop in computerized way.

Computers are one of the most important tasks between people in everyday life. One would find it very difficult to live without computers. If computer all over the world come to a half or stand still, it would be like the earth has stopped revolving. Computer is must in today’s life. No matter is what application it is a computer assisted system much more beneficial than the manual system. Computers help not only in aspects for faster. Computations but also lies in the most important factor of accuracy.

One might be fast at calculation at the fact lies to if he is accurate. Only here the computer plays a vital role and also the amount of data it can store, using related software helps in storing huge quantities of data.

Technology has developed at a very faster rate but the most important aspect of any system is the human know-how and the use of ideas to gear the computer. So that it perform required task. This process is essentially what system development is all about.

The main objective of this project is to Computerized all the manual function of the concern. The entire manual work is converted into computerized through different modules of this System. Using Visual Basic 6.0 as Front End and MS-Access as back-End and platform as Windows-98 developed the system.

CHAPTER - 1
1. INTRODUCTION

1.1. ABOUT THE PROJECT

The '**Paint Shop Management System**' This system provides very easy way to take order according to user re-quirements.This software helps in buying products of good quality from their suppliersand sales to their customer as per customer requirements Update the records regularly month wise. Mainly repetitions of data are avoided. Reduce the wastage of time. Security of data is also maintained from unauthorized access. Generation of yearly or monthly purchase/sale reports become easier. Day to day transactions is recorded in the master file. Fill comfort ability to take order. Mathematical calculation becomes easier.Thus it is a real world existing system that is very helpful to all people.The existing system 'Paint Shop Management System' is based on manual works andprocesses are done manually.This software maintains daily records in register and details of the system alsomaintenance daily transaction such as purchase and sales of all type of paints.The existing system maintain all details in supplier master file, sales records insales file and purchase records in the purchase file.This system is divided into two types of sales: They are:Whole sale,Retail sale,So that any kind of paints are affordable to all people.They also maintain the bill book on purchase or sales of any paint.All the works manually according to the requirements of users so that the morerequirements the selling of items. Nowadays in this electronic world all the works are maintain with the help ofcomputers so that day to day transaction even the small are done with it help.The initial basic step is firstly to ask for user login name & password to preventthe project from unauthorized access.The manual works for Paint Shop management System is to be computerized as perorder to overcome any type of situation affecting the existing system.It takes automatic orders without any samples maintaining the quality of theproduct.This system is designed for finding appropriate and suitable matches keeping thedesired quality of the concerned party as its mains objectives.The point to focus is that this software includes all types of paints and imple-ments all the processes through computers successfully.It holds all the requirements keeping in consideration the purchase sales activity.It also maintains the product quality throughout the year as per the requirements.Easy to take order i.e. supplier make the order to different companies and ac-cording to the which product is sold more is recorded and which are in demandare taken in mind.The inbuilt form are also included the paints the bills of all items that are sold.The user can easily find the data avoiding the wastage of time by selecting par-ticular menus used for specific purpose.Security of data is major concern so that the user keeps his/her personalusername and passwords so that security of data is maintained at many extents. Feasibility study is undertaken to determine the possibility of either improving theexisting system or developing a completely new system It is carried out whenever there is a complex problem of opportunity.It helps to obtain an overview of the problem and to get rough assessment ofwhether feasible solution exists.

This is essential to avoid committing large resources to project and then repenton it later. Determine the potential of existing system. Improve the existing system. Know what should be embedded in the system. Define the problems and objectives involved in a project.Avoid crash implementation of a new system.Avoid costly repairs at a later stage when the system the system is imple-mented. Avoid the ‘hardware approach’ i.e. getting a computer first and then decidinghow to use it.There are three aspects in feasibility study portion of the preliminary investiga-tion-

1.technical feasibility
2.economic feasibility
3.operational feasibility of the project

SYSTEM SPECIFICATION

1.1.1. HARDWARE SPECIFICATION

Processor	: Intel Pentium IV
Processor speed	: 2GHZ
RAM	: 512 MB RAM
Monitor	: 15’inch Monitor
Hard disk	: 40 GB
CD drive	: CD-ROM Drive 52X speed
Keyboard	: 104 keys Normal Keyboard
Mouse	: Logitech Mouse

1.1.2. SOFTWARE SPECIFICATION

Operating system	: Windows 7
Front End	: Visual basic 6.0
Back End	: Microsoft Access

1.2.3. SOFTWARE SPECIFICATION

An Overview of Front End

About Visual Basic 6.0:

Microsoft Visual Basic is one of the best **GUI**s and version 6.0 is the latest Version of the popular programming language. With its new features, Visual Basic is an even stronger contender in the application development area then ever before.

Microsoft Visual Basic, the fastest and easiest to create applications for Microsoft windows. Visual Basic provides with a complete set of tools to simplify Rapid Application Development **(RAD).**

Visual Basic 6.0:

The **"Visual"** part refers to the method used to create the graphical user interface **(GUI)**, Rather than writing numerous lines of code to describe the appearance and location of interface elements, we simply add rebuilt objects into place on screen. The **"Basic"** part refers to the BASIC (Beginners All - Purpose Symbolic Instruction Code) language, a language used by more programmers than any other language in the history of computing. Visual Basic has evolved from the original BASIC language and now contains several hundred statements, functions and keywords, many of which relate directly to the windows GUI.

The purpose of Visual Basic is to develop robust stand-alone application, games, and utilities less time than it takes in other languages. We can use also Active**X** technology to create internet-enabled applications that are limited only by our imagination.

Visual Basic 6.0 is the newest addition to the family of Visual Basic products. It allows us to create Windows applications for our PC without being an expert in C++ or other programming languages.

Visual Basic 6.0 is specially designed to utilize the Internet. It comes with several controls that allow us to create web-based applications called ActiveX executables. They will work just like stand-alone visual basic application, but they are accessed through the Microsoft Internet explorer 3.1

Web browser. This allows us to revise our applications and distribute them through the Internet.

Some new features in visual basic 6.0 are given below:

- VB 6.0 is most productive tool for creating high-performance enterprise and web-based applications.
- VB 6.0 integrated visual database tools and new data environment designer can visually design oracle and MS SQL sever databases and create reusable data access queries all without leaving the VB environment.
- Data report designer can quickly drag and drop custom data-bound controls to create forms or reports. Creation of custom data hierarchies is as easy as filling out a dialog box and dragging the command to the form.
- VB 6.0 professional edition is designed for individual professional or corporate developer who needs to create a client/server or Internet based applications.
- With the emergence of dynamic HTML page designer, multimedia rich applications can be developed using the document.
- Object model and dynamic HTML surface.

Visual Basic 6.0 Features

The Visual Basic Enterprise Edition contains all of the features includes with the Visual Basic professional edition and the Visual Basic learning edition . In addition, it contains the following features, available in the enterprise edition only. For more information about other editions of Visual Basic, see Visual Basic editions.

Visual Component Manager:

This tool stores, organizes, and shares reusable components. It can contain wizards, ActiveX components, Database connection objects, and many other components used in Visual Basic projects. It is suited to enterprise-wide component cataloguing and reuse because it is based on the open and scalable Microsoft Repository.

Visual Database Tools Integration:

With these designers you can visually create and modify database schemes and queries: Create SQL Server and Oracle database tables, drag and drop to create views, and automatically change column data types.

New Features Of Visual Basic 6.0

- ADO (ActiveX Data Objects).
- Data Environment.
- ADO Data Control.
- Enhanced Data Binding.
- OLEDB Support.
- Visual Database Tools Integration.
- Setup Wizard Data Enhancement.
- Data Report.
- Data View Window.
- SQL Editor.
- Hierarchical Flex Grid Control.
- Data Repeater Control.
- Passing ADO Record sets.
- Data Form Wizard Enhancement.
- Data Object Wizard.
- File System Objects.

ADO Control:

The ADO Data control user Microsoft ActiveX Data Objects (ADO) to quickly create connections between data-bound control and data provides. Data-bound controls are any controls that feature a Data Source property. Data provides can be any source written to the OLEDB specification. We can also easily create our own data provider using Visual Basic's class module.

Although we can use the ActiveX Data Objects directly in our applications, the ADO Data control has the advantage of being a graphic control (with back and Forward buttons) and an easy-to-use interface that allows we to create database applications with a minimum of code.

Data Reports:

The Microsoft Data Reports designer is a versatile data report generator that features the ability to be created, banded hierarchical reports. Used in conjunction with a data source such as the Data Environment designer, we can create reports from several different relational tables. In addition to creating printable reports, we can also export the report to HTML or text files.

Uses:

- Automatically create reports that are exported in HTML format for instant distribution on the Internet.
- Create reports that show the sums of transactions occurring on a daily basis.

Data Combo:

The Data Combo and Data List controls strongly resemble the standard list box and combo box controls, but there are some important difference that give them great flexibility and usefulness in database application. Both controls can be automatically filled from a database field from the data control to which they are bound. In addition, they can optionally pass selected field to a second data control, making them ideal for "lookup table" application.

Textbox:

A Text Box control, sometimes called an edit field or edit control, displays information entered at design time, entered by the user, or assigned to the control in code at run time.

Timer:

A Timer control can execute code at regular intervals by causing a Timer event to occur. The timer control, invisible to the user, is useful for background processing

Tool Bar:

A Toolbar control contains a collection of Button objects used to create a toolbar that is associated with an application.

Label:

A Label control is a graphical control and we can use to display text that a user can’t change directly.

List Box:

A List Box control displays a list of items from which the user can select one or more, if the number of items exceeds the number that can be displayed; a scroll bar is automatically added to the List Box control.

If no item is selected, the List Index property value is -1. The first item in the list is List Index 0, and the value of the List Count property is always one more than the largest List Index value.

Combo Box:

A Combo Box control combines the features of a Text Box control and List Box control-users can enter information in the text box portion or select an item from the list box portion of the control.

Data Combo:

THE Data Combo control is a data-bound Combo Box that is automatically populated from a field in an attached data source, and optionally updates a field in a related table of another data source.

Data Grid:

Displays and enables data manipulation of a series of rows and Columns representing records and fields from a Record sets object.

Data List:

The Data List control is a data-bound list that is automatically populated from a field in an attached data source, and optionally updates a field in a related table of another data source.

Check Box:

A Check Box control displays an X when selected; the X disappears when the Check Box is cleared. Use this control to give the user a True/False of Yes/No option.

We can use Check Box controls in, groups to display multiple choices from which the user can select one or more. We can also set the value of a heck Box programmatically with the Value property.

Command Button:

Use a Command Button control to begin, interrupt, OT ends a process. When chosen, a command Button appears pushed in and so is sometimes called a push button.

Data Report Objeect:

THE Data Report object is the programmable object that represents the Data Report designer.

Scroll Bar Controls:

Scroll bars provide easy navigation through a long list of items or a large amount of information.

Events:

An event is a specific action that occurs on or with a certain object. Visual Basic can respond to a variety of events: mouse clicks, changes in data, forms opening or closing, and many others. Events are usually the result of user action.

Using either an event procedure or a macro, we can add our own Custom response to closing an event occurs on a form, or control.

Delete:

The delete event occurs when the user performs some action, such as pressing the DEL key, to delete a record, but before the record is actually deleted.

Change Event:

The change event occurs when the contents of a text box or the text portion of a combo box change. It also occurs when we move from one page to another page in a tab control. Examples of this event include entering a character directly in the text box or combo box or changing the control's Text property setting by using a macro or Visual Basic.

Overview of Back End

Microsoft Access:

Microsoft access is a fully featured database management system (DBMS) that lets us collect, organize, find, display, and print information about our personal and business life. The amount and variety of information it can deal with is staggering. Access comes with wizards and a variety of predefined database elements.

Database:

A database is simply a collection of used data. The phone book is an example. Access database include such objects as tables, queries, forms, and more.

Tables:

In access tables are collection of similar data. With all tables can be organized differently, and contain mostly different information – but they should all be in the same database file. For instance we may have a database file called video store. Containing tables named members, tapes, reservations and so on. These tables are stored in the same database file because they are often used together to create reports help to fill out on screen forms.

Relational Database:

Access is a relational database. This means that it allows data that has been stored different places to be linked. Relational databases tools like access can help us manage information in three important ways.

They can

- Reduce redundancy
- Facilitate the sharing of information

- Keep data accurate

Records:

A record is all the information contained in one row of an access data sheet table. We might include a row for each entry.

Fields:

Fields are places in a table where we store individual chunks of information.

Primary Key And Other Indexed Fields:

Access use key fields and indexing to help speed many database operations. We can tell access, which should be key fields, or access can assign them automatically.

Controls and Objects:

Controls are access objects that help us display, print and use our data. They can be things like field labels that we drag around when designing reports they can be pictures, or titles for reports, or boxes containing the results of calculations.

Queries and Dynasets

Queries are request to information. When access responds with its list of data, that response constitutes a dynaset. A dynamic set of data meeting our query criteria. Because of the way access is designed, dynasts are updated even after we have made our query.

Forms:

Forms are onscreen arrangement that make it easy to enter and read data. We can also print the forms if we want to. We can design form our self, or let the access Auto form feature.

Reports:

Reports are paper copies of dynasets. We can also print reports to screen. Access helps us to create the reports by using report designer. There are even wizards for complex printouts.

Properties

Properties are the specifications we assign to parts of our database design. We can define properties for fields, forms, controls, and most other access objects

Calculations, Expressions, And Functions:

We can have access to do the calculations as required. We can instruct access to perform specific calculations by building expressions using built in functions.

Wizards:

Wizards are built in assistants that know how to guide us through steps necessary for common tasks.

Access Wizards Can Help Us Create

- Queries
- Tables
- Forms
- Reports
- Macro
- Mailing labels
- Modules
- Controls and buttons

2. SYSTEM STUDY

2.1. EXISTING SYSTEM

In simple situations which involve limited paths and limited items, it is possible to track cargos with a pencil and paper. In case of maintaining a large organization and with lots of technological developments, the transaction recording with the pen and paper is worthless and waste of time. In present system every work is carried out manually which is time consuming and leads to miss entry of details. Searching and updating records is tedious as many books are to be traversed. Storage of data needs separate and provide to store the books if not so; it leads to loss of data. This system is also much time consuming and expensive.

2.1.1. DRAWBACKS OF EXISTING SYSTEM

- Requires a person to note all the details.
- Takes a long time to evaluate the result.
- Can’t able to view an abstract description of transactions.
- The details which are recorded may lead to confusion while billing.
- Doesn’t helpful for large organizations.
- Any small mistake in any process may include much confusion.
- The existing system is time consuming.
- The maintenance process takes long time.
- Lack of accuracy

2.2. PROPOSED SYSTEM

The drawbacks, which are faced in the existing system, can be eradicated by using this project, which has been computerized. The system, which is proposed now to computerize all the details, is maintained manually in previous days. The proposed system is developed by using VB as Front end and MS-ACCESS as backend which is an effective menu driven package. This package used is much powerful and large number of is much powerful and large number of data required. The package also aims to provide faster service to the management proposed system thus aim at removing all the complexities in the existing system.

2.2.1. ADVANTAGES OF PROPOSED SYSTEM

- The system is more user friendly
- It is equipped with powerful GUI(Graphical User Interface)
- The interrelated data are grouped into different input screens.
- Provides a high uniformity among all screens format.
- The system works in high speed and accuracy.
- It generates neat formatted report, based on which the decision is possible.
- It handles bulk amount of data.

3. SYSTEM DESIGN AND DEVELOPMENT

3.1. INPUT DESIGN

The input design is the process of entering data to the system. The input design goal is to enter to the computer as accurate as possible. Here inputs are designed effectively so that errors made by the operations are minimized.

The inputs to the system have been designed in such a way that manual forms and the inputs are coordinated where the data elements are common to the source document and to the input. The input is acceptable and understandable by the users who are using it.

Input design is the process of converting user-originated inputs to a computer-based format input data are collected and organized into group of similar data. Once identified, appropriate input media are selected for processing.

The input design also determines the user to interact efficiently with the system. Input design is a part of overall system design that requires special attention because it is the common source for data processing error. The goal of designing input data is to make entry easy and free from errors.

Input design is the process of connecting the user-originated inputs into a computer to used format. The goal of the input design is to make the data entry logical & free from errors. Errors in the input database controlled by input design.

This application is being developed in a user-friendly manner. The forms are being designed in such a way that during the processing the cursor is placed in the position where the data must be entered. An option of selecting an appropriate input from the values of validation is made for each of every data entered. Help managers are also provided whenever the user entry to a new field to that he/she can understand what is to be entered. Whenever the user enter an error data, error manager displayed user can move to next field only after entering the correct data.

3.2. OUTPUT DESIGN

Output design is the process of converting computer data into hard copy that is understood by all. The various outputs have been designed in such a way that they represent the same format that the office and management used to.

Computer output is the most important and direct source of information to the user. Efficient, intelligible output design should improve the systems relationships with the user and help in decision making. A major form of output is the hardcopy from the printer.

Output requirements are designed during system analysis. A good starting point for the output design is the Data Flow Diagram (DFD). Human factors educe issues for design involves addressing internal controls to ensure readability.

3.3. FILE DESIGN

In computing, a file design (or filesystem) is used to control how data is stored and retrieved. Without a file system, information placed in a storage area would be one large body of data with no way to tell where one piece of information stops and the next begins. By separating the data into individual pieces, and giving each piece a name, the information is easily separated and identified. Taking its name from the way paper-based information systems are named, each group of data is called a "file". The structure and logic rules used to manage the groups of information and their names are called a "file system".

Some file systems are used on local data storage devices; others provide file access via a network protocol. Some file systems are "virtual", in that the "files" supplied are computed on request or are merely a mapping into a different file system used as a backing store. The file system manages access to both the content of files and the metadata about those files. It is responsible for arranging storage space; reliability, efficiency, and tuning with regard to the physical storage medium are important design considerations.

3.4. DATABASE DESIGN

Database can be used to perform the useful work of storing and retrieving the information.

The main skill in building a database lies in understanding how a database handles the kinds of information that wish to store, and in design of screen forms and printed reports. The main skill in using a database lies in inventing queries. A ‘query’ a type question that the database can understand is used to extract particular information.

3.5. SYSTEM DEVELOPMENT

3.5.1. DESCRIPTION OF MODULES

1. Company/Customer details

This form is to enter the details of the customer like name, address, and phone number. We can add a new record, delete it and modify it. Each and every record is validated and then entered.

2. Supplier Details:

This module consists of the information like supplier name, address and their contact phone number etc., which in turn helpful to know the regular suppliers. This supplier details can be used in all bill preparation, sub modules and mainly used in purchase details.

3. Products Master:

The main module of this project is deals with this product master. In this product master module, the user can feed the details like product id, product name, type of product, product color, unit of measurement of each product.

4. Sales entry:

This module is used to store the details when a product is sold. So we could know how many products are sold monthly or the company can see the business status at the year end.

5. Stock details:

In this module we can view the details of the stock available and have to maintain continuously, then only we come to know the stock of products and data can be retrieved from the item table.

6. Reports:

This module is used to generate various reports. This module prepares reports for the above module.

4. SYSTEM TESTING AND IMPLEMENTATION

4.1. SYSTEM TESTING

System testing is the process of exercising software with the intent of finding and ultimately correcting errors. This fundamental philosophy does not change for web applications, because Web-based systems and application reside on a network and interoperate with many different operating system, browsers, hardware platforms, and communication protocols; the search for errors represents a significant challenge for web application.

The distributed nature of client\server environments, the performance issues associated with transaction processing, the potential presence of a number of different hardware platforms, the complexities of network communication, the need to serve multiple clients from a centralized database and the requirements imposed on the server all combine to make testing of client\server architectures.

TESTING ISSUES

- Client GUI considerations
- Target environment and platform diversity considerations
- Distributed database considerations
- Distributed processing considerations

TESTING METHODOLOGIES

System testing is the state of implementation, which is aimed at ensuring that the system works accurately and efficiently as expect before live operation commences. It certifies that the whole set of programs hang together. System testing requires a test plan that consists of several key activities and steps for run program, string, system and user acceptance testing. The implementation of newly designed package is important in adopting a successful new system.

Testing is an important stage in software development. The system test in implementation stage in software development. The system test in implementation should be confirmation that all is correct and an opportunity to show the users that the system works as expected. It accounts the largest percentage of technical effort in the software development process.

Testing phase in the development cycle validates the code against the functional specification. Testing is vital to the achievement of the system goals. The objective of testing is to discover errors. To fulfill this objective a series of test step unit, integration, validations and system tests were planned and executed.
The test steps are,

(i) Unit Testing: -

Unit testing is testing changes made in an existing or new program. This test is carried out during the programming and each module is found to be working satisfactory.

(ii) Integration Testing: -

A comprehensive integration testing is carried out using integrated test plans in the design phase of the development as guide to ensure the behavior of functions with live data.

(iii) Validation Testing: -

Software validation is achieved through a series of tests that demonstrates conformity with requirements. Thus the proposed system under consideration has been tested by validation and found to be working satisfactorily.

(iv) Output Testing: -

Asking the users about the format required by them tests the outputs generated by system under consideration. It can be considered in two ways. One on the screen and the other is printed format. The output format on the screen is found to be correct as the format designed in the system design.

(v) System Testing: -

This is to verify that all the system elements have been properly integrated and perform allocated functions. Testing is executing a program to test the logic changes made in it and with intention of finding errors. Tests are also conducted to find discrepancies between system and its original objective, current specification and documents.

4.2. SYSTEM IMPLEMENTATION

System implementation is the stage of the project that the theoretical design is turned into a working system. If the implementation stage is not properly planned and controlled, it can cause error. Thus it can be considered to be the most crucial stage in achieving a successful new system and in giving the user confidence that the new system will work and be effective.

Normally this stage involves setting up a coordinating committee, which will act as a sounding board for ideas; complaints and problem. The first task is implementation planning; i.e., deciding on the methods and time scale to be adopted. Apart from planning two major task of preparing for implementation are, education taken place much earlier in the project; at the implementation stage the emphasis must be on training in new skills to the staff. Once the staff has been trained, the system can be tested.

After the implementation phase, the user staff is adjusted to the changes created by the candidate system, evaluation and maintenance to bring the new system to standards. The activities of the implementation phase can be summarized as,

- Implementation planning
- Education planning
- System planning

The stage consists of:

- Testing the developed program with sample data.
- Detection and correction of error.
- Creating whether the system meets user requirements.
- Making necessary changes as desired by the user.

4.3.1 IMPLEMENTATION PROCEDURES

Implementation is the stage in the project where the theoretical design is turned into working system. This is the most crucial stage in achieving a new successful system and in giving confidence of the new system for the users that it will work efficiently. Implementation of software refers to the final installation of the package in its real environment, to the satisfaction of the intended users and the operations of the system. In many organizations someone who will not be operating it, will commission the software development project. The people who are not sure that the software is meant to make their job easier. In the initial stage they doubt their software but we have to ensure that the resistance does not build up as

- The active user must be aware of the benefits of using the system.
- Their confidence in the software is build up.
- Proper guidance be imparted to the user so that he is comfortable in using the application.

The implementation procedures involves careful planning, investigation of the current system and the constraints on implementation, design of methods to achieve the change over, an evaluation of change over methods. Initially a preliminary implementation plan is prepared to schedule and manage many different activities that must be completed for a successful system implementation. The preliminary plan serves as a basis for the initial scheduling and assignment of resources to important implementation activities. The preliminary plan has been updated throughout the implementation phase in order to reflect the current state. A complete implementation plan includes the following items: selection of quality personnel ,system training plan, system test plan, equipment installation pan, system conversion plan, overall implementation plan. Apart from planning major task of preparing the implementation procedures are education and training to the users. The more complex the system being implemented, the more involved be the system's analysis and design effort required just for implementation. An implementation coordinating committee based on polices of individual organization is appointed. The implementation process begins with preparing a plan for implementation of the system. According to this plan the activities have been carried out; discussions have been made regarding the equipment and resources. According to the above plan the necessary equipment has to be acquired to implement the new system.

4.3.2 USER MANUAL

USER TRAINING

User Training is designed to prepare the user for testing & consenting the system. . They are

1) User Manual.
2) Help Screens.
3) Training Demonstration.

1) User Manual:

The summary of important functions about the system and software can be provided as a document to the user.

2) Help Screens:

This features now available in every software package, especially when it is used with a menu. The user selects the “Help” option from the menu. The system accesses the necessary description or information for user reference.

3) Training Demonstration:

Another User Training element is a Training Demonstration. Live demonstrations with personal contact are extremely effective for Training Users.

5. CONCLUSION AND FUTURE ENHANCEMENTS

The “**PAINT SHOP MANAGEMENT SYSTEM**” is developed simply with limited VB components. So this software will be enhanced with all types of survey requirements.

It can be expanded in future by providing more reports. As the concern may require many reports to check their status. The software system needs some graphics facilities to make the project as commercial software. So interactive graphics feature and innovative things will be adopted in future.

To enrich the application usage and time consumption this system could be implemented in network environment. Thus the backend for this project can be modified like that to give the feature**.**

SCOPE FOR FUTURE ENHANCEMENT

The world of computers is not static. It is always subject to change. The technology today will become outdated the very next day. To keep abstract of the technological improvements the system need refinements, so it is concluded, it will be improved for further enhancements, whenever the user needs an additional feature into it.

This system totally ends on the data that has been entered by the personnel. Any false information in the order entry will lead to wrong decision. This package has been designed such that this can be extended to any extent that could help it being more efficient system as the code in the system allow the programmer to develop any other modules with ease. Any further enhancements of the system can be made to the existing system without any need to change the previous coding. Hence this package gives good scope for further development

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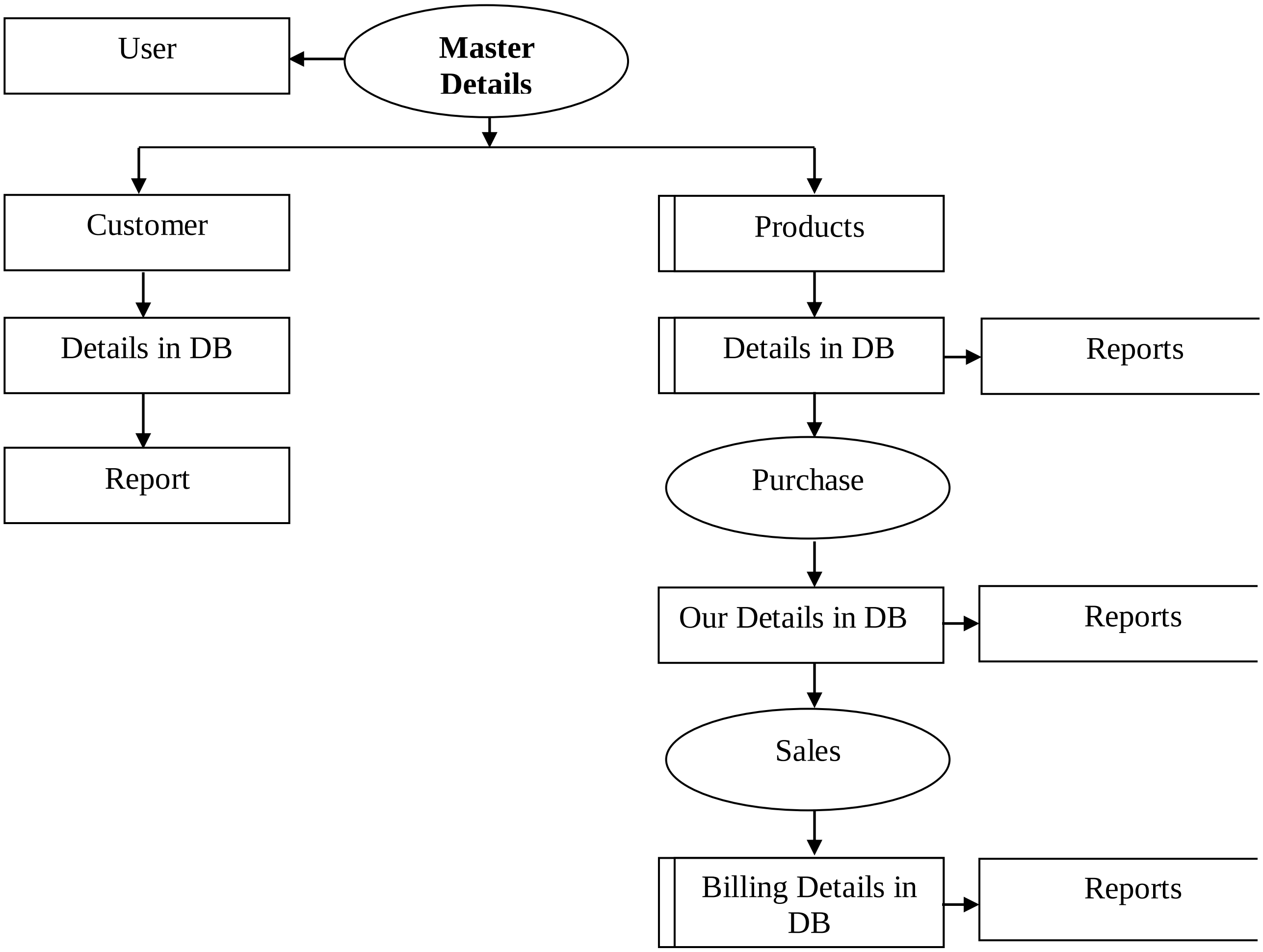
APPENDICES

A. DATA FLOW DIAGRAM



B. TABLE STRUCTURE

Table Structure

Table Name: **tblCustomer**

Primary Key: cid

Field Name	**Data Type**	**Size**	**Description**
cid	Number	2	Customer Id
cName	Text	20	Customer Name
Address	Text	40	Customer address
pinCode	Text	15	Pin Code
Phno	Text	10	Phone number
Mailid	Text	40	Mail id

Table Name: **tblSupplier**

Primary Key: supCode

Field Name	**Data Type**	**Size**	**Description**
supCode	Number	2	Supplier Code
supName	Text	20	Supplier Name
Address	Text	40	Customer address
pinCode	Text	15	Pin Code
Phno	Text	10	Phone number
Mailid	Text	40	Mail id
webURL	Text	40	Website URL
conPerson	Text	30	Contact Person

Table Name: **tblProducts**

Primary Key: pId

Field Name	**Data Type**	**Size**	**Description**
pid	Number	2	Product Id
pName	Text	30	Product Name
Unit	Text	5	Unit of Measurement
prdClass	Text	5	Product Class
Price	Number	8	Product Price
Pcolor	Text	10	Product Color

Table Name: **tblPurchaseMaster**

Primary Key: purId

Field Name	**Data Type**	**Size**	**Description**
purId	Number	2	Customer Id
supId	Text	10	Supplier Id
Total	Number	8	Total
Tax	Number	8	Tax amout

Table Name: **tblPurchaseChild**

Foreign Key: purId

Field Name	**Data Type**	**Size**	**Description**
purId	Number	2	Customer Id
supId	Text	10	Supplier Id
Total	Number	8	Total
Tax	Number	8	Tax amount

Table Name: **tblSalesMaster**

Primary Key: billNo

Foreign Key: cusId

Field Name	**Data Type**	**Size**	**Description**
Billno	Number	2	Bill Number
cusId	Number	2	Customer Code
salDate	Date / Time	4	Sales Date
Tax	Number	8	Tax
netAmount	Number	8	Net Amount

Table Name: **tblSalesChild**

Foreign Key: billNo

Field Name	**Data Type**	**Size**	**Description**
billNo	Number	2	Bill Number
prdId	Number	2	Product Id
prdName	Text	25	Product Name
Qty	Number	2	Quantity
Price	Number	8	Price
totAmt	Number	8	Total Amount

Table Name: **tblStock**

Foreign Key: prodId

Field Name	**Data Type**	**Size**	**Description**
prodId	Number	2	Product Id
prdName	Text	30	Product Name
Stk_in_hand	Number	2	Stock Quantity

C. SAMPLE CODING

SAMPLE CODING

```
Private Sub cust_Click()
rptCustomer.Show

End Sub

Private Sub customer_Click()
frmCustomer.Show

End Sub

Private Sub end_Click()
End
End Sub

Private Sub MDIForm_Load()

End Sub

Private Sub prod_Click()
rptProduct.Show

End Sub

Private Sub product_Click()
frmProduct.Show

End Sub

Private Sub purch_Click()
rptPurchase.Show

End Sub

Private Sub purchase_Click()
frmPurchase.Show
```

```
End Sub

Private Sub sale_Click()
rptSales.Show

End Sub

Private Sub sales_Click()
frmSales.Show

End Sub

Private Sub stk_Click()
rptStock.Show

End Sub

Private Sub Command1_Click()
CLEARTXT Me
Combo1.Text = ""
Text1.SetFocus

End Sub

Private Sub Command2_Click()
If connectionTable("tblProducts") = True Then
   dbRs.AddNew
      dbRs("pId") = Text1.Text
      dbRs("pName") = Text2.Text
      dbRs("unit") = Combo1.Text
   dbRs.Update
End If
MsgBox "Product Details Successfully Saved", vbInformation + vbOKOnly,
"Customer Details"
Command1.SetFocus


End Sub

Private Sub Command3_Click()
```

```
viewTableName = "Product"
frmReports.Show
frmReports.lblTitle.Caption = "View/Modify Product Master Details"

End Sub

Private Sub Command4_Click()
viewTableName = "Product"
frmReports.Show
frmReports.lblTitle.Caption = "View/Modify Product Master Details"

End Sub

Private Sub Command5_Click()
Unload Me

End Sub

Private Sub Form_Activate()
Combo1.AddItem ("Kg")
Combo1.AddItem ("Ltr(s)")
Command1.SetFocus

End Sub
Private Sub Command1_Click()
CLEARTXT frmCustomer
Text1.SetFocus

End Sub

Private Sub Command2_Click()
If connectionTable("tblCustomer") = True Then
    dbRs.AddNew
        dbRs("cid") = Text1
        dbRs("cName") = Text2
        dbRs("Address") = Text3
        dbRs("phNo") = Text4
        dbRs("mailId") = Text5
    dbRs.Update
End If
```

```
MsgBox "Customer Details Successfully Saved", vbInformation +
vbOKOnly, "Customer Details"
Command1.SetFocus

End Sub

Private Sub Command3_Click()
viewTableName = "customer"
frmReports.Show
frmReports.lblTitle.Caption = "View/Modify Customer Primary Details"

End Sub

Private Sub Command4_Click()
viewTableName = "customer"
frmReports.Show
frmReports.lblTitle.Caption = "View/Modify Customer Primary Details"

End Sub

Private Sub Command5_Click()
Unload Me

End Sub

Private Sub Text5_Change()

End Sub

Private Sub Command1_Click()
If Command1.Caption = "ENABLE MODIFY" Then
   Command1.Caption = "DISABLE MODIFY"
   viewGrid.AllowAddNew = True
   viewGrid.AllowUpdate = True
   viewGrid.AllowDelete = True
ElseIf Command1.Caption = "DISABLE MODIFY" Then
   Command1.Caption = "ENABLE MODIFY"
   viewGrid.AllowAddNew = False
   viewGrid.AllowUpdate = False
```

```
    viewGrid.AllowDelete = False
End If

End Sub

Private Sub Form_Load()
Set viewGrid.DataSource = Nothing
If viewTableName = "customer" Then
    If connectionText2("Select * from tblCustomer") = True Then
        Set viewGrid.DataSource = dbRs2
    End If

ElseIf viewTableName = "Product" Then
    If connectionText2("Select * from tblProducts") = True Then
        Set viewGrid.DataSource = dbRs2
    End If

ElseIf viewTableName = "Purchase" Then
    If connectionText2("Select * from tblPurchase") = True Then
        Set viewGrid.DataSource = dbRs2
    End If

End If

End Sub

Private Sub viewGrid_Click()

End Sub

Dim newRow As Integer
Dim sNo As Integer
Dim pId(10) As String
Dim pId1 As String

Private Sub Combo1_Click()
Dim Qry As String
Qry = "Select * from tblCustomer where cId=" & Combo1.Text & ""
If connectionText(Qry) = True Then
    If Not dbRs.EOF Then
```

```
        Text2 = dbRs("cName")
    End If
End If

End Sub

Private Sub Combo2_Click()
Dim Qry As String
Qry = "Select * from tblProducts where pName='" & Combo2.Text & "'"
If connectionText(Qry) = True Then
    If Not dbRs.EOF Then
        pId1 = dbRs("pId")
    End If
End If

End Sub

Private Sub Command1_Click()
CLEARTXT Me
salesDate.Value = Date
Text1.SetFocus

End Sub

Private Sub Command2_Click()
Dim Lp As Integer
Dim tmpBillno As Integer
Dim stk As Integer
Dim newQty As Integer
Dim stkFail As Boolean

For Lp = 1 To detailsGrid.Rows - 1
If connectionText("Select * from tblStock where prodID='" & pId(Lp) & "'")
= True Then
    'MsgBox dbRs("qty")
    If Not dbRs.EOF Then
    stk = dbRs("qty")
    If stk > 5 Then
        newQty = stk - detailsGrid.TextMatrix(Lp, 2)
        If Not newQty <= 0 Then
```

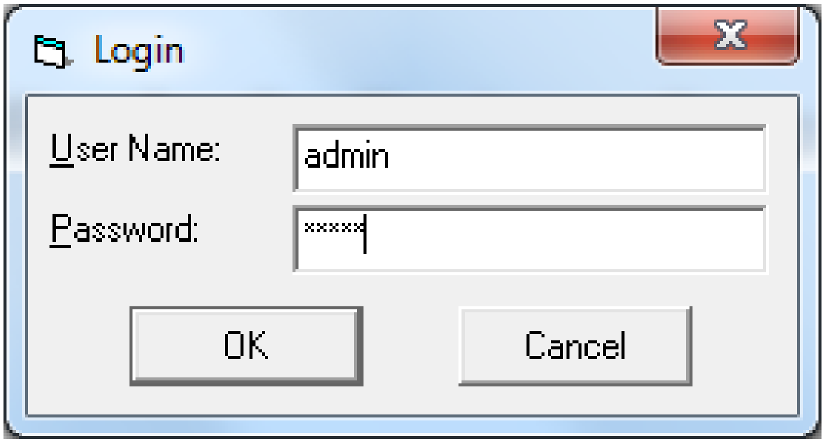
```
            dbRs("qty") = newQty
            dbRs.Update
            'stkFail = False
        Else
            stkFail = True
            Exit For
        End If
    Else
        stkFail = True
        Exit For
    End If
    End If
End If
Next

'If stkFail = False Then
'
'End If

If stkFail = True Then
    MsgBox "Please check your Stock Before Proceeding", vbInformation + vbOKOnly
    Exit Sub
End If

If connectionTable("tblSales") = True Then
    dbRs.AddNew
        dbRs("BillNo") = Text1.Text
        dbRs("salDate") = salesDate.Value
        dbRs("cusName") = Text2
        'dbRs("customerAddress") = txtCusAddress
        dbRs("tax") = Text7
        dbRs("netAmount") = Text8
    dbRs.Update
End If

'If connectionText("Select max(billNo) from tblSales") = True Then
'    If Not dbRs.EOF Then
'        'dbRs.MoveFirst
'        tmpBillno = dbRs(0)
'    End If
'End If
'MsgBox tmpBillno


If connectionTable("tblSalesChild") = True Then
    For Lp = 1 To detailsGrid.Rows - 1
    dbRs.AddNew
        dbRs("billNo") = Text1.Text
        'dbRs("prodId") = detailsGrid.TextMatrix(Lp, 0)
        dbRs("prodId") = pId(Lp)
        dbRs("prodName") = detailsGrid.TextMatrix(Lp, 1)
        dbRs("qty") = detailsGrid.TextMatrix(Lp, 2)
        dbRs("Price") = detailsGrid.TextMatrix(Lp, 3)
        dbRs("total") = detailsGrid.TextMatrix(Lp, 4)
    dbRs.Update
    Next
End If
MsgBox "Sales Details Saved Successfully", vbInformation + vbOKOnly

End Sub

Private Sub Command3_Click()
rptSales.Show

End Sub

Private Sub Command5_Click()
Unload Me

End Sub

Private Sub Command6_Click()
detailsGrid.TextMatrix(newRow, 0) = sNo
detailsGrid.TextMatrix(newRow, 1) = Combo2.Text
detailsGrid.TextMatrix(newRow, 2) = Text4
detailsGrid.TextMatrix(newRow, 3) = Text5
detailsGrid.TextMatrix(newRow, 4) = Text6
pId(sNo) = pId1
```

```
If (MsgBox("Want to add Another Item...?", vbQuestion + vbYesNo,
"Additional Item") = vbYes) Then
   detailsGrid.Rows = detailsGrid.Rows + 1
   sNo = sNo + 1
   newRow = newRow + 1
   Text4 = ""
   Text5 = ""
   Text6 = ""
   Combo2 = ""
   Combo2.SetFocus
Else
   Exit Sub
End If

End Sub

Private Sub Form_Activate()
detailsGrid.ColWidth(0) = 700
detailsGrid.TextMatrix(0, 0) = "S.No"
detailsGrid.ColWidth(1) = 2200
detailsGrid.TextMatrix(0, 1) = "Particulars"
detailsGrid.ColWidth(2) = 1000
detailsGrid.TextMatrix(0, 2) = "Qty"
detailsGrid.ColWidth(0) = 1000
detailsGrid.TextMatrix(0, 3) = "Price"
detailsGrid.ColWidth(0) = 1000
detailsGrid.TextMatrix(0, 4) = "Total"

If connectionText("Select pName, prodId from tblProducts, tblStock where
tblProducts.pId=tblStock.prodId") = True Then

If Not dbRs.EOF Then
dbRs.MoveFirst
   Do While Not dbRs.EOF
      Combo2.AddItem (dbRs("pName"))
      dbRs.MoveNext
   Loop
End If
End If
```

```
If connectionText("Select * from tblCustomer") = True Then

If Not dbRs.EOF Then
dbRs.MoveFirst
    Do While Not dbRs.EOF
        Combo1.AddItem (dbRs("cId"))
        dbRs.MoveNext
    Loop
End If
End If

newRow = 1
sNo = 1

Command1.SetFocus

End Sub

Private Sub Text5_Change()

End Sub

Private Sub Text6_GotFocus()
Dim qty As Integer, price As Single
If Not (Text4 = "" Or Text5 = "") Then
    qty = CInt(Text4)
    price = CSng(Text5)
    Text6 = qty * price
End If

End Sub

Private Sub Text8_GotFocus()
Dim Lp As Integer
Dim totalSum As Integer
Dim tax As Single
Dim netAmt As Single
totalSum = 0
For Lp = 1 To detailsGrid.Rows - 1
If Not detailsGrid.TextMatrix(Lp, 4) = "" Then
```

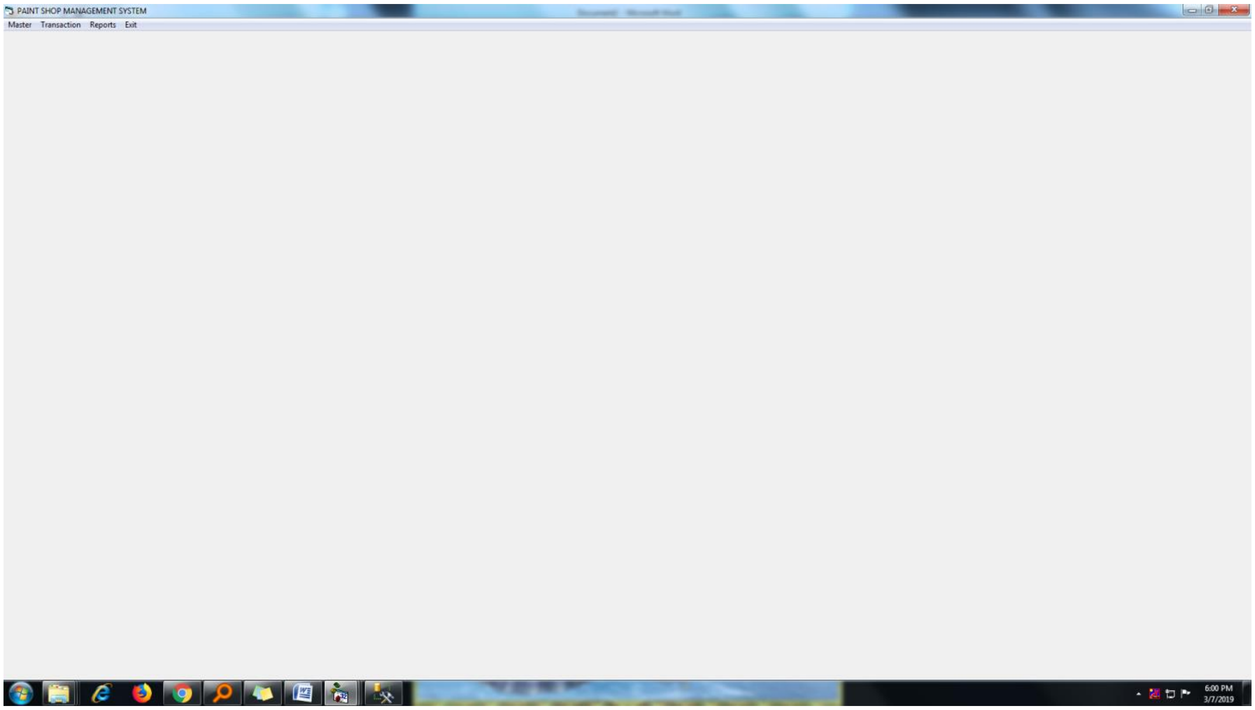
```
    totalSum = totalSum + CInt(detailsGrid.TextMatrix(Lp, 4))
Else
    Exit For
End If
Next
If Not Text7 = "" Then
    tax = Text7.Text / 100
    netAmt = totalSum * tax
    Text8 = totalSum + netAmt
Else
    MsgBox "Please Check Your Values", vbInformation
    Exit Sub
End If

End Sub
```

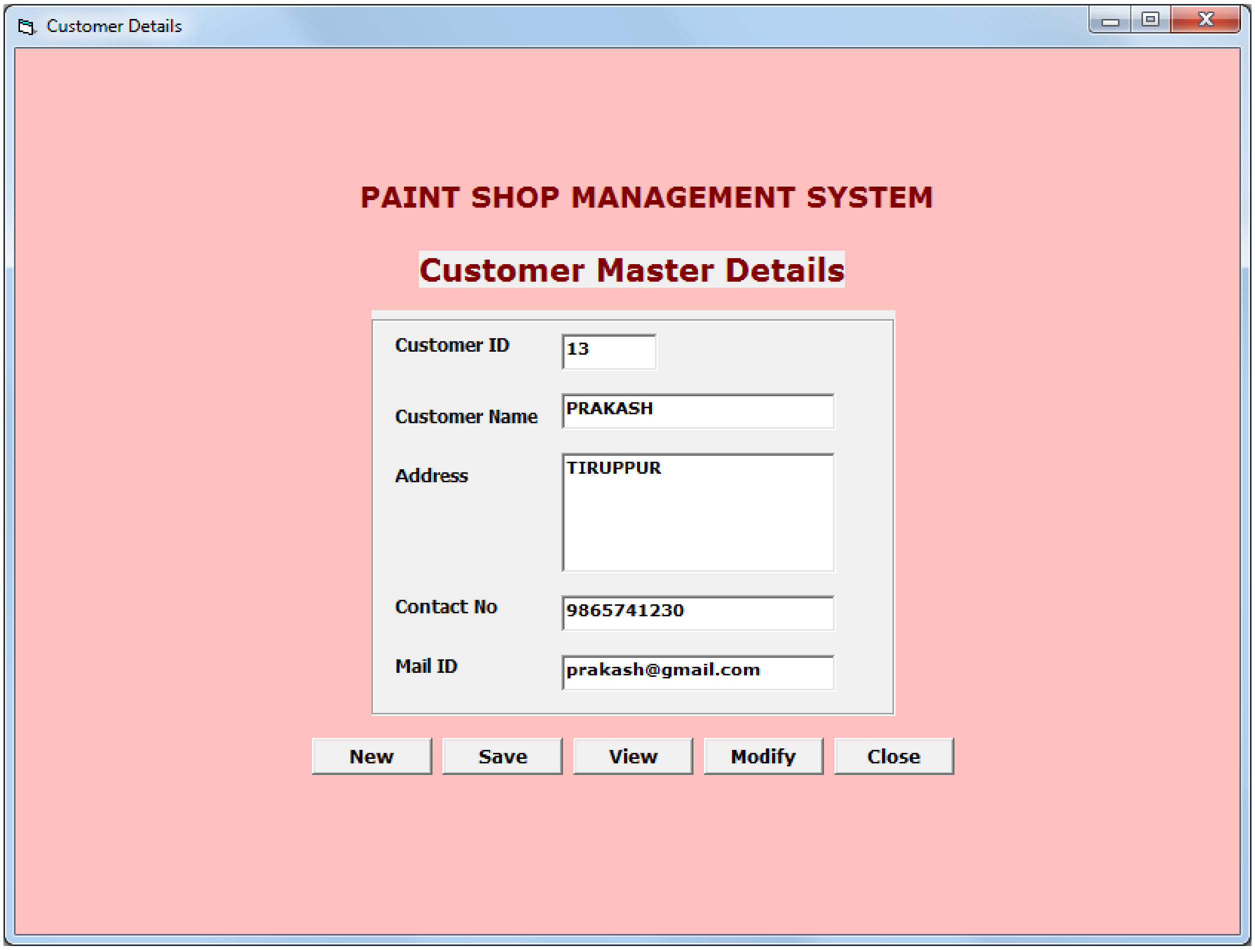
D. SAMPLE SCREENS



User Name: admin

Password: *****


PAINT SHOP MANAGEMENT SYSTEM
Master
Transaction
Reports
Exit
6:00 PM
3/7/2019



PAINT SHOP MANAGEMENT SYSTEM

Customer Master Details

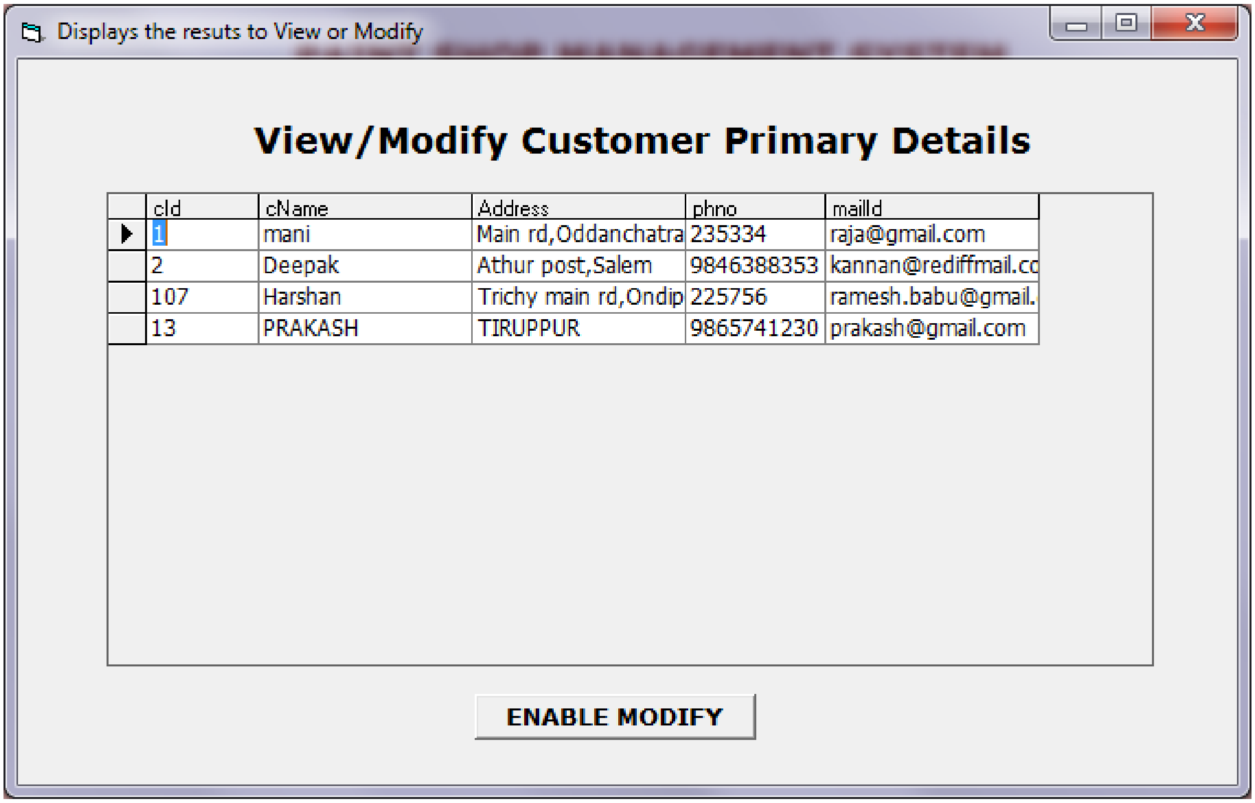
Customer ID: 13

Customer Name: PRAKASH

Address: TIRUPPUR

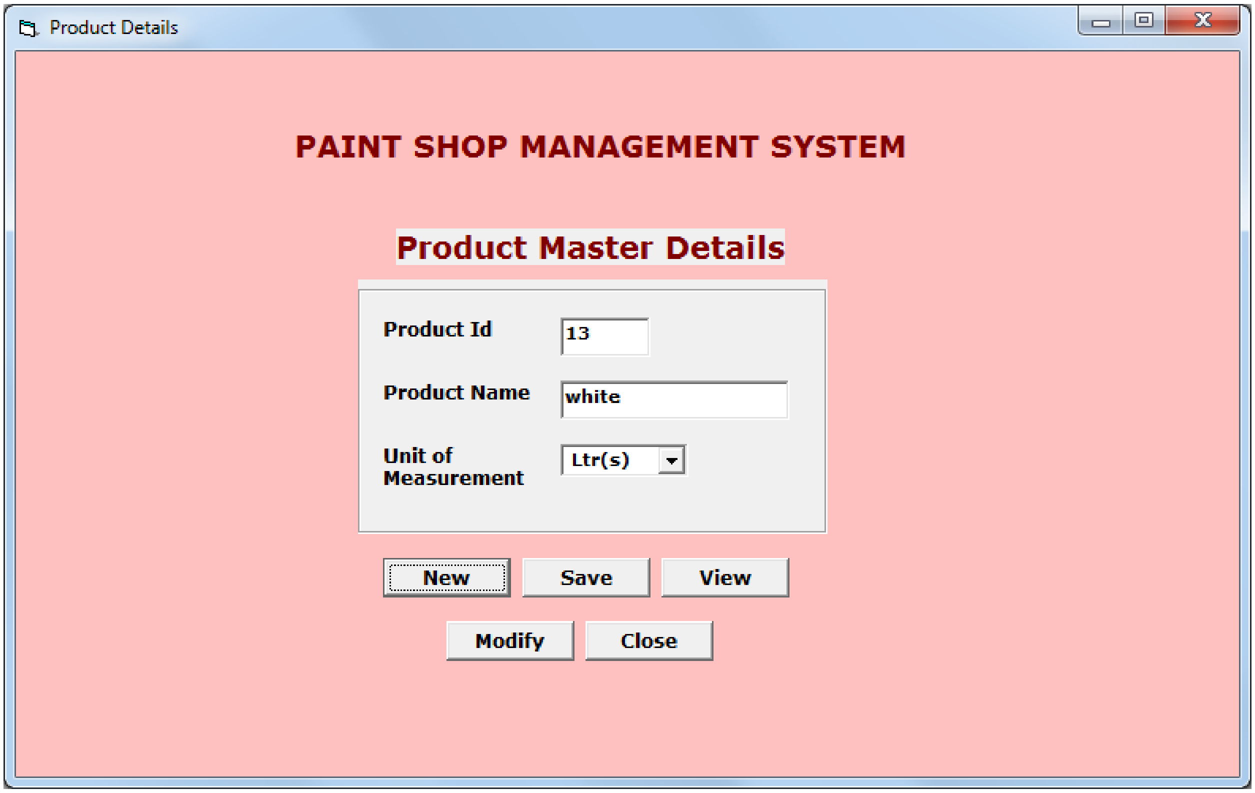
Contact No: 9865741230

Mail ID: prakash@gmail.com



View/Modify Customer Primary Details

	cId	cName	Address	phno	mailId
▶	1	mani	Main rd,Oddanchatra	235334	raja@gmail.com
	2	Deepak	Athur post,Salem	9846388353	kannan@rediffmail.co
	107	Harshan	Trichy main rd,Ondip	225756	ramesh.babu@gmail.
	13	PRAKASH	TIRUPPUR	9865741230	prakash@gmail.com



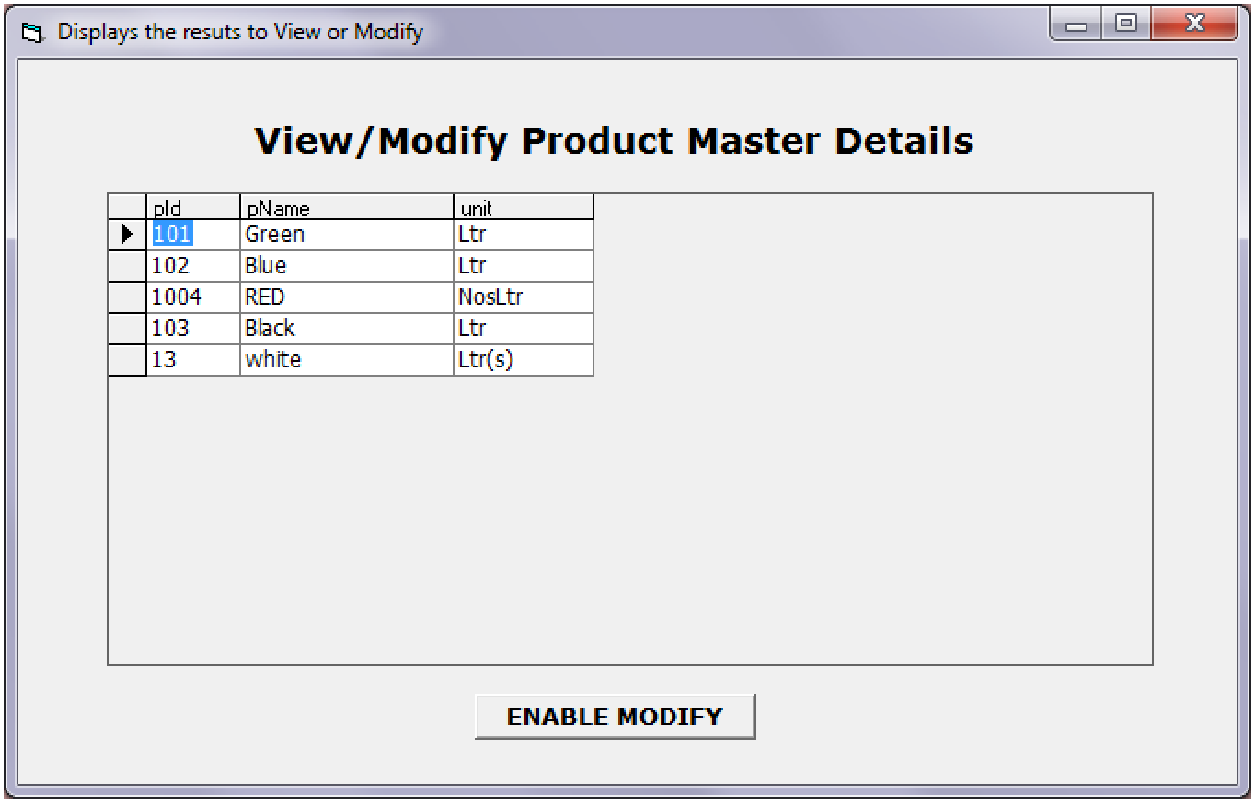
PAINT SHOP MANAGEMENT SYSTEM

Product Master Details

Product Id: 13

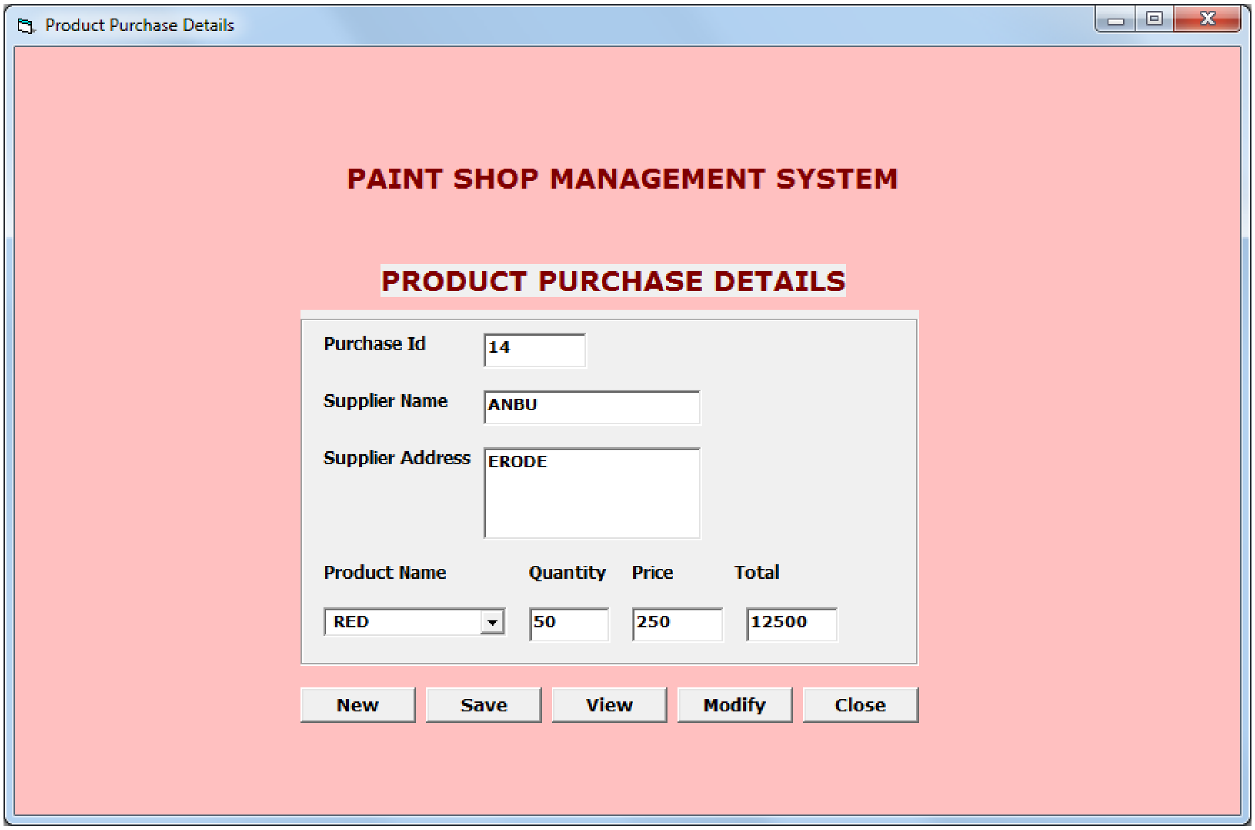
Product Name: white

Unit of Measurement: Ltr(s)



View/Modify Product Master Details

pId	pName	unit
101	Green	Ltr
102	Blue	Ltr
1004	RED	NosLtr
103	Black	Ltr
13	white	Ltr(s)



PAINT SHOP MANAGEMENT SYSTEM

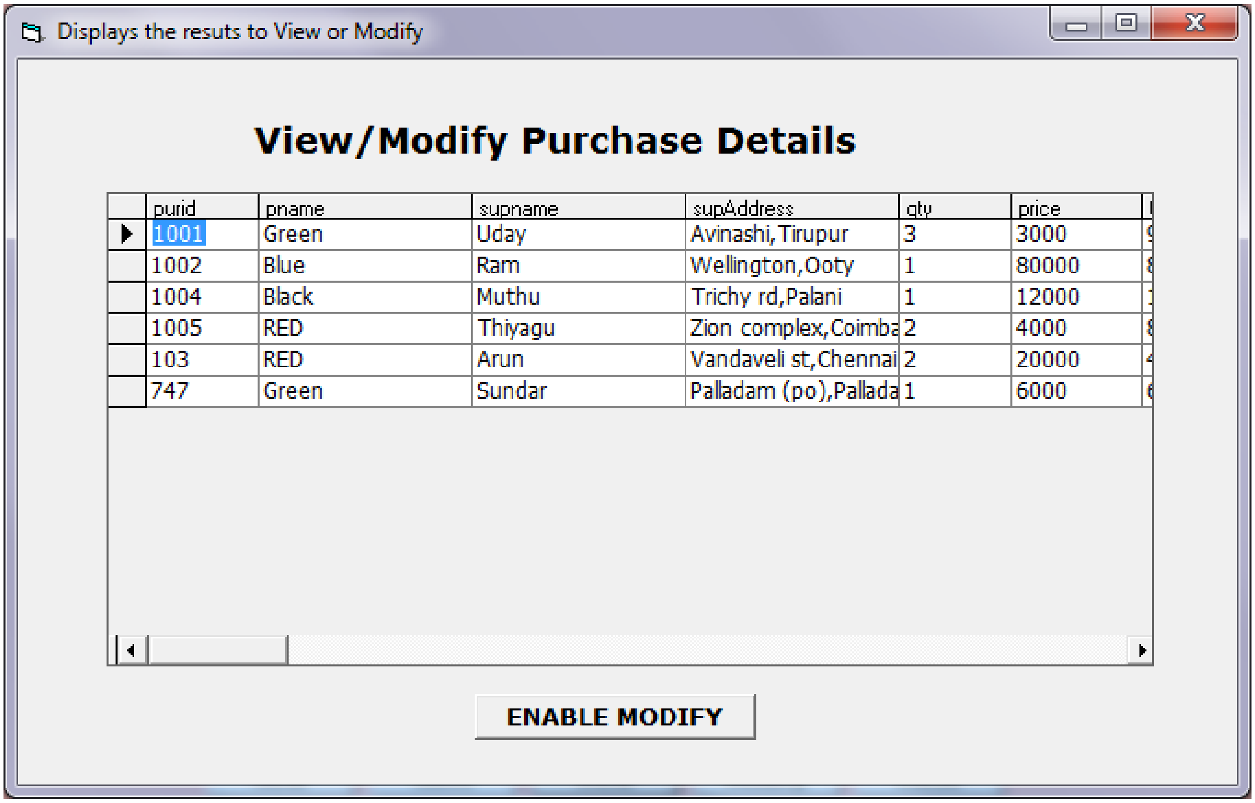
PRODUCT PURCHASE DETAILS

Purchase Id: 14

Supplier Name: ANBU

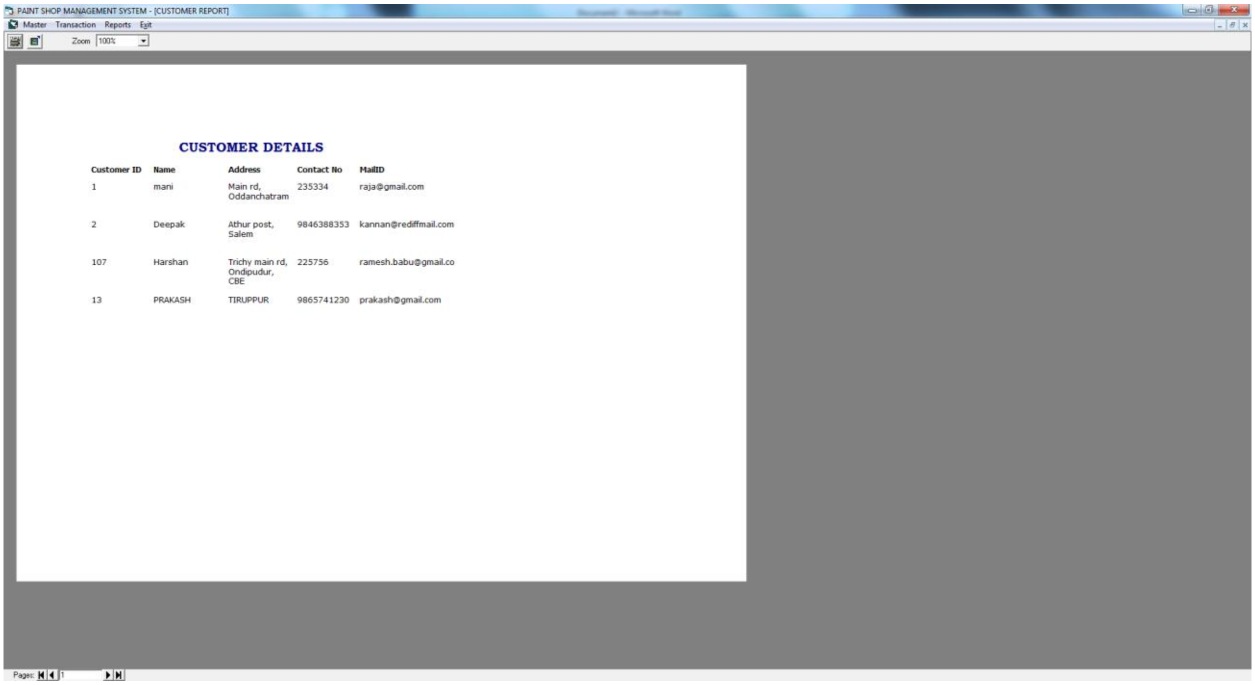
Supplier Address: ERODE

Product Name	Quantity	Price	Total
RED	50	250	12500



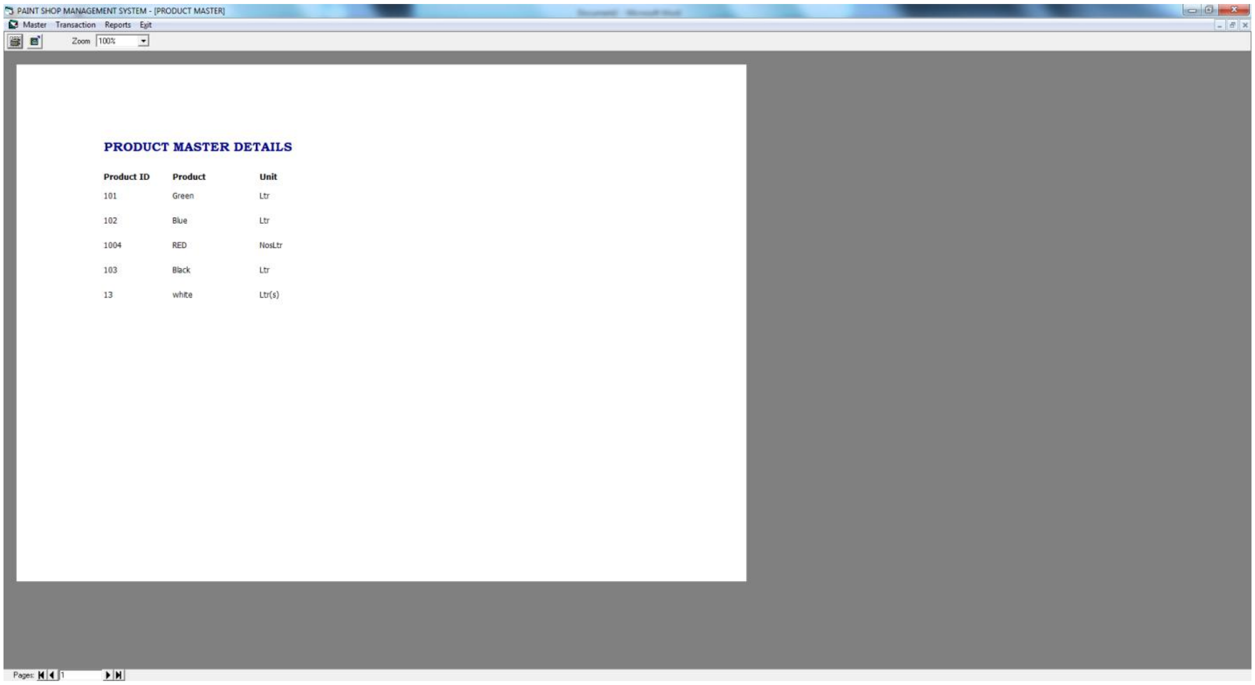
View/Modify Purchase Details

purid	pname	supname	supAddress	qty	price
1001	Green	Uday	Avinashi,Tirupur	3	3000
1002	Blue	Ram	Wellington,Ooty	1	80000
1004	Black	Muthu	Trichy rd,Palani	1	12000
1005	RED	Thiyagu	Zion complex,Coimba	2	4000
103	RED	Arun	Vandaveli st,Chennai	2	20000
747	Green	Sundar	Palladam (po),Pallada	1	6000


PAINT SHOP MANAGEMENT SYSTEM - [CUSTOMER REPORT]
Master Transaction Reports Exit
Zoom 100%
Pages: 1

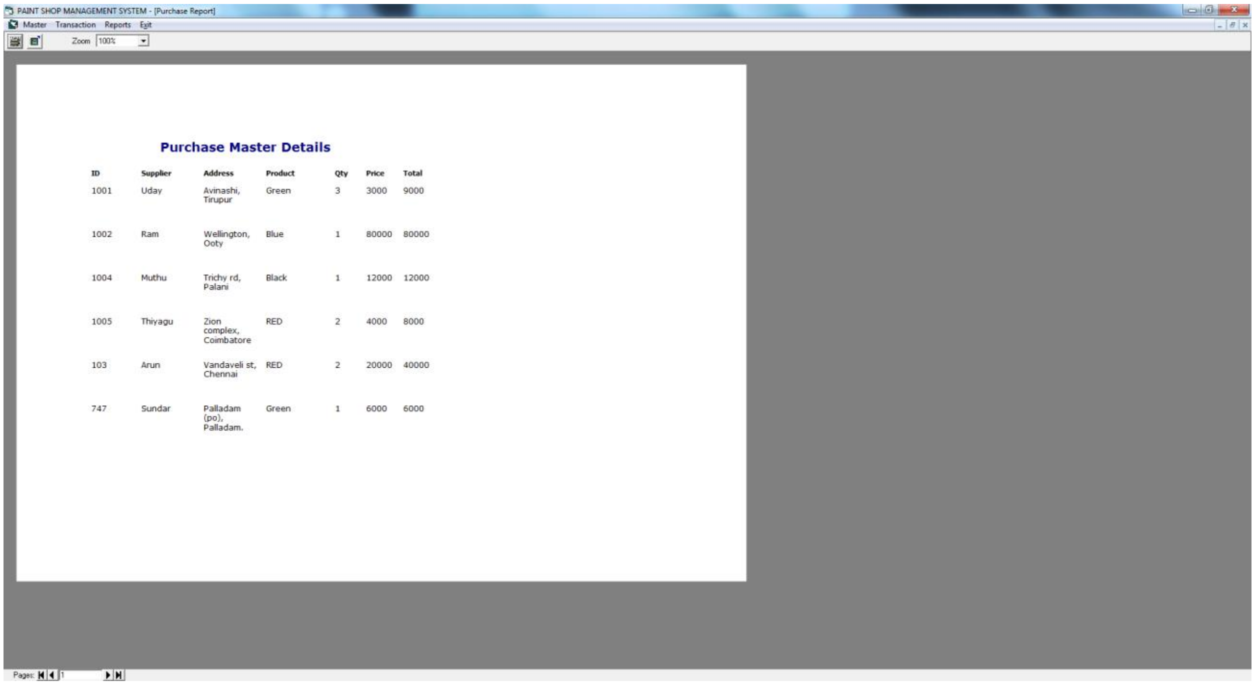
CUSTOMER DETAILS

Customer ID	Name	Address	Contact No	MailID
1	mani	Main rd, Oddanchatram	235334	raja@gmail.com
2	Deepak	Athur post, Salem	9846388353	kannan@rediffmail.com
107	Harshan	Trichy main rd, Ondipudur, CBE	225756	ramesh.babu@gmail.co
13	PRAKASH	TIRUPPUR	9865741230	prakash@gmail.com



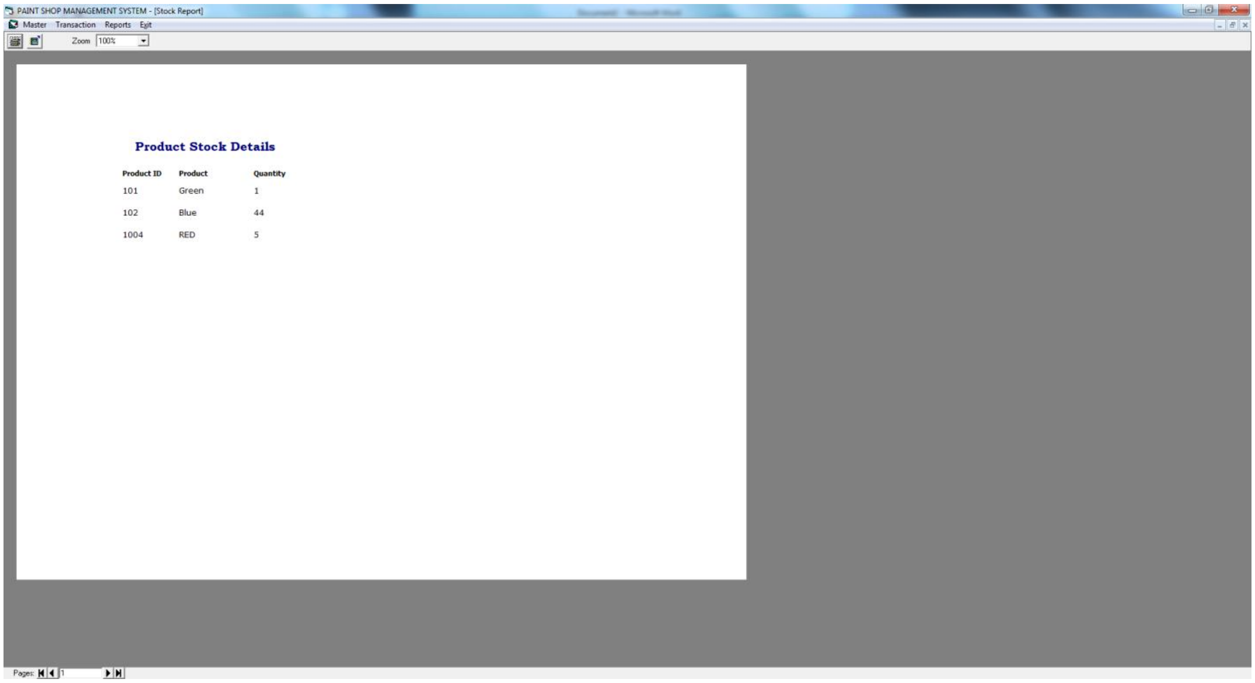
PRODUCT MASTER DETAILS

Product ID	Product	Unit
101	Green	Ltr
102	Blue	Ltr
1004	RED	NosLtr
103	Black	Ltr
13	white	Ltr(s)



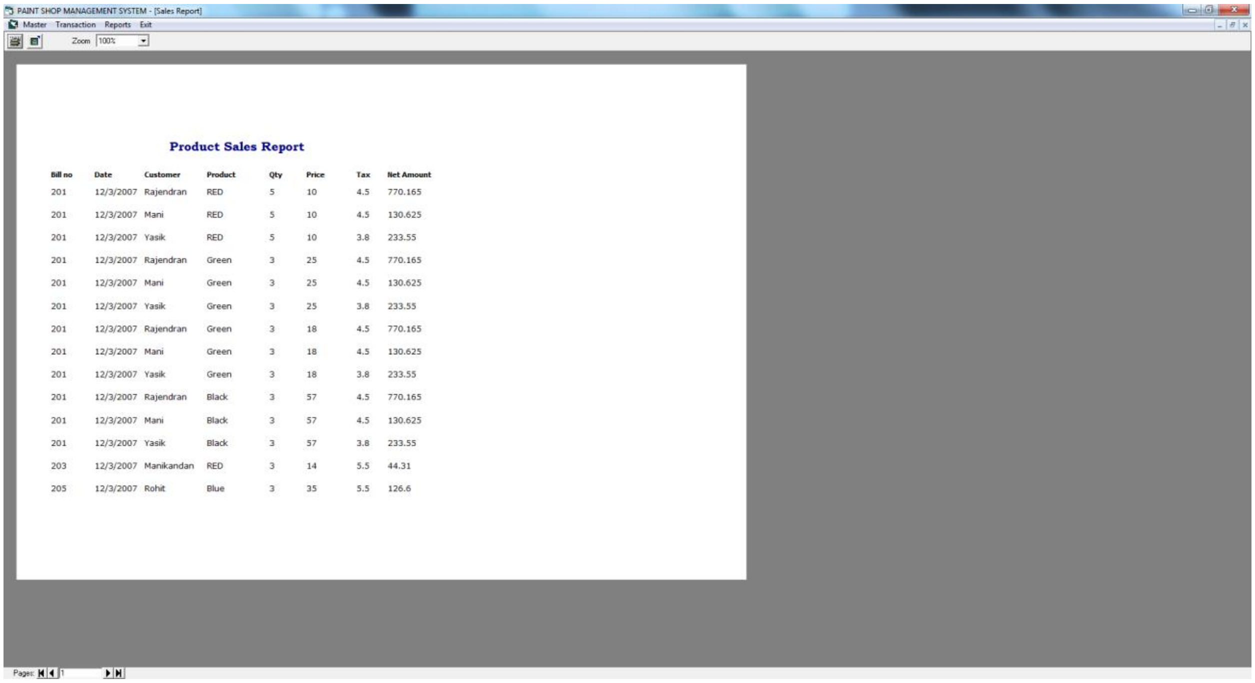
Purchase Master Details

ID	Supplier	Address	Product	Qty	Price	Total
1001	Uday	Avinashi, Tirupur	Green	3	3000	9000
1002	Ram	Wellington, Ooty	Blue	1	80000	80000
1004	Muthu	Trichy rd, Palani	Black	1	12000	12000
1005	Thiyagu	Zion complex, Coimbatore	RED	2	4000	8000
103	Arun	Vandaveli st, Chennai	RED	2	20000	40000
747	Sundar	Palladam (po), Palladam.	Green	1	6000	6000



Product Stock Details

Product ID	Product	Quantity
101	Green	1
102	Blue	44
1004	RED	5



Product Sales Report

Bill no	Date	Customer	Product	Qty	Price	Tax	Net Amount
201	12/3/2007	Rajendran	RED	5	10	4.5	770.165
201	12/3/2007	Mani	RED	5	10	4.5	130.625
201	12/3/2007	Yasik	RED	5	10	3.8	233.55
201	12/3/2007	Rajendran	Green	3	25	4.5	770.165
201	12/3/2007	Mani	Green	3	25	4.5	130.625
201	12/3/2007	Yasik	Green	3	25	3.8	233.55
201	12/3/2007	Rajendran	Green	3	18	4.5	770.165
201	12/3/2007	Mani	Green	3	18	4.5	130.625
201	12/3/2007	Yasik	Green	3	18	3.8	233.55
201	12/3/2007	Rajendran	Black	3	57	4.5	770.165
201	12/3/2007	Mani	Black	3	57	4.5	130.625
201	12/3/2007	Yasik	Black	3	57	3.8	233.55
203	12/3/2007	Manikandan	RED	3	14	5.5	44.31
205	12/3/2007	Rohit	Blue	3	35	5.5	126.6